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HEALTH

A WEEKLY JOURNAL OF

DOMESTIC AND SANITARY SCIENCE.

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"Reason's whole pleasure—all the joys of sense—
Lie in three words, HEALTH, PEACE, and COMPETENCE."—*Pope.*

EDITED BY DR. ANDREW WILSON, F.R.S.E. &c.

VOL. V.—No. 112.] FRIDAY, MAY 29, 1885. [PRICE TWOPENCE.
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HEALTH

EDITED BY

DR. ANDREW WILSON, F.R.S.E., &c.

LONDON: *FRIDAY, MAY* 29, 1885.

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Notes by the Way

BY THE EDITOR.

"Health is the foundation of all our physical happiness."—*Herder.*

THE topic of the week has been the "inoculation" for cholera, which a certain Dr. Jaime Ferran, of Valencia, in Spain, is reported as having discovered. "Inoculation" for small-pox, as most of my readers know, preceded vaccination. The former operation consisted in taking matter from small-pox pustules, and in thus introducing the veritable disease directly into the blood of the "inoculated" person. Whatever may have been the merits or demerits of "inoculation" for small-pox, we know that it usually produced a mild attack of that disease, which protected against the more serious form of small-pox as ordinarily caught by infection. I shall return to the subject of "inoculation" for small-pox at a future date. Suffice it for the present to say that this practice has been superseded by "vaccination," and is now declared to be illegal.

WHAT was done in bygone ages in Hindostan, and more than a century ago in Turkey, for small-pox, Dr. Ferran is reported to be doing to-day in Spain for cholera. He takes cholera-matter from a patient, cultivates its germs in fluids (said to be bile or gastric juice), and after thus obtaining modified and less virulent crops of "cholera-germs," introduces these germs into the blood of the healthy individual. He sows, in other words, a modified crop of cholera-germs in the healthy body. In a few hours the "inoculated" individual sickens. According to the account given by two physicians of Madrid who were operated on by Dr. Ferran, cramps, diarrhœa, fever, and even delirium, supervened on the operation. But in sixteen hours they had completely recovered, and if the experiments are to be regarded as successful, will henceforth be cholera-proof. A mild attack of this disease, as in the small-pox inoculation of old, is regarded as being protective against the graver form caught by infection.

AN analogy to vaccination is also, however, seen in these cholera-experiments. For, just as small-pox matter is modified into cow-pox matter by its passage through the blood of the cow, so by the "cultivations" of Dr. Ferran, the cholera-germs are modified and rendered capable of producing the milder and protective attack. If the experiments in question are verified—at present I have only meagre press-telegrams as my sources of information—Dr. Ferran may be congratulated on having made a discovery of great importance. We shall, no doubt, have "anti-inoculators," in due time, protesting against the practice. So be it. Anything will be a relief from the chronic silliness of the anti-vaccinators, who resemble circus-horses in their inability to see beyond the narrow beaten track in which they delight to gambol.

FROM Spain, cholera rarely is absent. Detached cases occur perpetually, and occasionally develop into epidemics. At Alcera, a town of 16,000 inhabitants, a cholera epidemic is raging. Since May 1, 5,432 of the inhabitants have been inoculated by Dr. Ferran, leaving a balance of some 10,500 non-inoculated persons. Of the inoculated portion of the town only seven have been attacked by cholera, and none have succumbed; while out of the non-inoculated portion, 64 have been attacked, and thirty of these have died. Put in another way, 1 in 776 have been attacked among the inoculated, and 1 in 163 among the non-protected. These results, if actually proved, would certainly show that the protective value of inoculation is very high. It cannot, of course, be expected to be absolutely effective in every case. No one but an ignorant anti-vaccinator, making no allowance for the variations of life, would expect or demand that any system of protection should be absolutely without a flaw.

WE shall look with eagerness for further news from Spain. I would only add that if Dr. Ferran's experiments are proved to be trustworthy, Dr. Klein will require to revise his position as an opponent of the germ-origin theory of cholera. As I understand his procedure, Dr. Ferran actually "cultivates" the germs for his inoculations. He therefore clearly agrees with Dr. Koch in regarding cholera as a germ-disease; although, of course, it is open to Dr. Klein to infer that other than germ-principles form the active agents in the work of inoculation.

A NEW health-danger to the lower animals has appeared on the horizon. It would seem that consumption is liable to be transferred from man to birds. A farm-labourer at Charenton, in France, suffering from consumption, and too weak to undertake heavy work, was placed in charge of the poultry-yard. The fowls were observed to swallow the matter this man coughed up from his lungs. The birds began in a few weeks to die off in a mysterious manner, and the farmer sent one to be examined at the veterinary school of Alfort. Here M. Nocard found the lungs and liver of the bird infested with tubercle matter and bacilli, or germs, presumably corresponding to those found in the human patient. The fowls were killed and the poultry-yard disinfected. As the account stands, it would appear that the birds were infected from the human being, and there is nothing at all improbable in the inference. There exists a great field for inquiry in the shape of investigation into the relations between human and animal diseases, and into the relative degrees of infection which may be possible or probable between man and animals, and *vice versâ*.

IT is now generally admitted that "prevention" of disease is the great aim of popular instruction in health. The school, equally with the family circle, presents us with an important field for the exercise of such preventive skill. Details regarding what is being done in Belgium in

this direction have recently come to hand, and I recommend the perusal of the Belgian measures to our own national authorities.

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In Brussels all the children attending the communal schools are examined by the doctors attached to the sanitary service of the town. Those amongst them who manifest signs of debility are at once put under a preventive treatment, which consists generally of cod-liver oil in winter and a tonic mixture in summer. There is a rule directing that each child should have a separate medicine-glass of its own, and that the medicine should be given by the masters at school. If the medicine were taken home it would never be administered with proper punctuality, and the oil might at times, adds the account, be used to grease the father's boots. Of some 10,000 children there were 1,094 treated in this manner from 1882 to 1883 at Brussels. Of this number 69, or 6·3 per cent., were completely cured, and 628, or 57·4 per cent., were much benefited. In 203 cases, 18·4 per cent., no improvement was noticed, while the result is unknown in 194, or 17·7, of the cases.

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The removal of the children to other towns or other schools accounts for the incomplete character of the statistics, but sufficient, says the account from which I quote, has been done to show on what a large scale this system of preventive medicine has been applied. It is needless to add that the medicine and medical supervision are entirely gratuitous, but the State is already beginning to recoup its outlay, for every year shows a distinct improvement in the health and physique of the military recruits. The teeth of the children are also examined, and during the same year no less than 1,250 pupils required the services of the dentists, which they would probably have never obtained but for this compulsory intervention of the State. I re-echo the writer's words when he concludes: "It will be seen, therefore, that if we are not to be behind the Belgians in our care for the physical welfare of the children attending our primary schools, there is something more to be done than merely providing penny dinners."

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Those who desire to see what vaccination has done for the health of India should read a paper by Surgeon-Major Pringle, M.D., published, after being read before the Society of Arts, in the Journal of that body for May 15, 1885. Dr. Pringle, in the course of a long and most interesting paper, gave an account of the system of "inoculation"—that is the use of actual small-pox matter—as practised in ancient times in the Himalayas, for the limitation of the ravages of small-pox. It seems that the profession of "inoculator" is a hereditary one, and is confined to the priesthood.

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In 1864, Dr. Pringle inaugurated the work of vaccination in the districts to which he was appointed, and the account he gives of the successful application of this principle to the province of Tirri Ghurwal should serve to convince doubters that for small-pox we have, in efficient vaccination, a true preventive. It is interesting and noteworthy to find one of the oldest civilisations of the world cheerfully availing itself of modern scientific advance, while at home we are still, in many quarters, debating and doubting the benefits of such progress.

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The Society of Science Letters and Art of London has awarded the Gold Medal of the Society to Mr. W. P. Buchan, sanitary engineer and master plumber, Glasgow, for "practical and literary contributions towards the advancement of sanitation."

Original Essays

"Life is not to live, but to be well."—*Martial.*

OLD AGE AND ITS HISTORY.

By Dr. Andrew Wilson.

How to attain old age—how best to conserve the powers of life—how most satisfactorily to utilise life's organisation so as to live long and to die easily and happily—such are the thoughts which have engaged the attention of some of the wisest and best of men since the world of human thought began. There is no lack of quackery in this topic, it is true. The practices of the quack and the impostor never leave any domain untouched which is likely to bring in a harvest from human ignorance and human credulity. From the "Elixirs of Life" of mediæval times down to modern rules of living framed in the conceits and quips and cranks of science, "falsely so-called," the pursuit of a green old age has never been allowed to flag. We meet now with a theorist who declares that salt is the bane of existence, and that the avoidance of this condiment is the golden key which unlocks the secret and mystery of healthy age. Others advise us to eschew all mineral foods, as if such a piece of advice were in any degree practicable, seeing that from the water we drink to the bread and meat or fruits we consume, one and all include mineral constituents. Another delusionist advertises phosphorus preparations as the sole and only means of bracing up brain and nerve for the task of living long and healthily. With what surprise the great Roman orator who discoursed of old age would have viewed the marvellous projects and crudities of modern science for all-aiming length of days, may, perchance, be better imagined than described. But it is true, nevertheless, that "all sorts and conditions of men" will always seek after old age by every means in their power, and hope, often against hope itself, that the cutting of the "silver cord" by the scissors of Atropos may be kept as long as possible from their doors.

Old age is thus a fit theme for a scientific oration, and Professor Humphry, of Cambridge, chose it as the topic of an address delivered the other day before the Medical Society of London. He dealt, it is true, rather with "the changes incidental to old age" than with the means for attaining that condition of life. But such details as are included under the head of the changes of age form a necessary preliminary for understanding how best we may conserve and husband our resources, and adapt ourselves to the inroads of bodily wear and tear, which are as inevitably the results of law as are the movements of the planets in their spheres. Dr. Humphry emphasises this latter thought. The development and march of the animal frame towards full growth, adult life, and manhood or womanhood, is, he remarks, a marvellous and interesting series of processes. But the changes which bring about full growth are not the only processes life knows. Once past life's meridian, there are actions, processes, developments, and retrogressions, which are as truly parts of the cycle of human organisation as are birth and maturity. It is only the quack and the charlatan who will promise to delay these backslidings in structure and function which herald and mark the approaching twilight of life. The true man of science knows they are part and parcel of life's constitution, and recognises that while we may meet them boldly, and be well prepared for their advent, we can never avoid them, override them, nor escape their sway.

Speaking of the changes incidental to old age, Professor Humphry says:—"The march of changing events in the human body from the age of 40 or 50, to 100, is as regular, as orderly, as developmental, though less quick, and therefore less apparent, as it is from birth to adolescence, or from conception to birth. It is one of the results of that inscrutable *vis*—call it what you will, and refer it to what you will—which makes all nature one, which determines the course and end of each animate and inanimate object, and by which, in the well-known words of Keble—

'To its funeral pile this aged world is borne.'

"A main feature of the 'ascending,' if we may so call it, development, the development from birth to maturity, is an increase of material, an increase of activity, and an increase of strength—of passive or resisting, as well as of active, strength; and the main feature of the 'descending' development, the development from maturity onwards, is a lessening of material, a lessening of activity, and a lessening of strength. In the normal 'ascending' development, material and strength are added to the several parts of the body in due relation to their respective requirements, so that they may all grow on *pari passu*, and the proper harmony of proportion may be maintained between them; and in the normal 'descending' development, the relative proportions of the several structures and organs are preserved, while weight, force, and activity are being lowered by gradual and well-adjusted diminution of material and of nutritive activity. During the time that the bones are becoming lighter and less capable of offering resistance, the muscles become, in like proportion, lighter and weaker, and with a narrowing range of action; and the associated volitional and other nerve-apparatus exhibits a corresponding lowering of energy and force. The loss of will to run, jump, and indulge in athletic sports is, or should be, commensurate with the inability of the muscles to effect the requisite movements, and of the bones to bear the requisite shocks.

"There should not even be a sigh for what is gone, or a longing for its return, though great, perhaps greater than ever, may be the pleasure in beholding the perfection of bodily form and in witnessing the manifestations of strength and activity in the supple frames of the young. The weakening of the heart, and the diminished elasticity of the arteries, provide a proportionately feebler blood-current; and a lower digestive power and a lessened appetite, provide a smaller supply of fuel to feed, not enough to choke, the slowing fires. Thus the capacity for action is diminishing, and the demand for it and the material for it are diminishing also; and all are diminishing in due ratio to one another. It may be said, indeed, that at all periods of life the healthy and well working, and especially the enduring, quality of the body, depends upon a good adjustment, a good balance, of the several parts; and it is upon the well-ordered, proportionately or developmentally regulated, decline in the several organs that the stages which succeed to maturity are safely passed, and that crown of physical glory, a healthy old age, is attained."

The adjustment of life-wants to the diminished power which marks increasing age is thus clearly seen, and the recognition of this relationship at once gives the death-blow to all hopes of mysterious renewal of youth—of the rejuvenescence in which Faust rejoiced, and of the "eternal youth" of which the poets have dreamed and sung. It is interesting, even if sad, to note how easily the flickering flame of life in the very aged may be extinguished by exertion unsuited to the circumstances of their lives. Thus we are told that "A time comes at length when, in the course of the descending developmental processes, the several components of the machine, slowly and much, though equally, weakened, fail to answer to one another's call, which is also weakened, when the nervous, the circulatory, and the respiratory organs have not force enough to keep one another going; then the wheels stop rather than are stopped, and a developmental or physiological death terminates the developmental or physiological decay. The old man who had gone to bed apparently much as usual is found dead in the morning, as though life's engine had been unable to repair itself in sleep sufficiently to bear the withdrawal of the stimulus of wakefulness.

"Or some exertion may be followed by too great exhaustion. Dr. Willis, the attendant upon King George III., at the age of ninety, after a walk of four miles to see a friend, sat down in his chair and went to sleep, or was thought to be asleep, but he did not wake again. Or some slight, unusual, scarcely noticed excitement may have the same result. A cattle-dealer, aged ninety-eight, who attended Norwich Cattle Market on a Saturday in December of last year, soon after talking and laughing somewhat heartily with a few friends on the following Tuesday, was found to be dead. Or a slight indisposition, further lowering the status and force of some organ, fatally disturbs the feebly maintained equilibrium. A lady, aged ninety-four, attended the early service at church, to which she walked a distance of a quarter of a mile to and fro, caught a slight cold, and died in the night."

It is true that in the economy of the nature we see around us, and in the ordinary routine which lower animal life is made to pursue by nature, little or no provision is made for "old age," in the true sense of the term. Comparatively few animals attain great length of years. The elephant is said to reach a great age; some birds are credited with living long; but, as a rule, the perpetual warfare in which lower life is engaged, and the struggle for food and against enemies, seen and unseen, render length of days a condition of rarity below the human domain. Dr. Humphry naturally lays stress on this phase of matter. Civilisation, the recognition of human needs, the cultivation of sympathy and mutual aid, together with the scientific knowledge of health-conditions, have made "old age," in man at least, a possible goal to which the race is entitled to look forward with some degree of assurance and trust. If disease is a reality of civilised life, no less is the power of combating its ravages, of warding off its attack, and of securing to ourselves the best of life's chances, and of a staple gain of our race.

Once recognising the place of "old age"—healthy old age, and the natural sleeping away of life into the painless death and forgetting—in the sphere of human science we may see that the study of the changes the body undergoes in its later periods of existence rises in importance as a necessary part of all health-knowledge. To the qualifications for old age, and to the characters of the body in old age, we will return in subsequent papers. Meanwhile, the words of the author already named are worth bearing in mind, as introductory to this interesting topic:—"It may, therefore, be said that the prolongation of life into and through the periods of decay, and into and through the processes of disease—indeed, almost, if not quite, the very existence of decay and disease—are the result of human forethought and sympathy. In other words, decay and disease are, by civilisation, substituted for quick and early death. Without attempting to balance the pros and cons of this, we know it to be a position from which there is not, and ought not to be, any disposition to recede; and if there were the wish, there is not the possibility. The onward march of civilisation is a necessity, and the onward progress of disease will tend to go with it.

"But it does remain for forethought and sympathy to narrow the range of the evils they have themselves engendered, or which have sprung up with them; and it is pre-eminently the noble work of our profession to contribute to this—to weed out, and check the growth of, the morbid tares, and to help the good seed to grow on to its full harvest—to prevent, that is, the origin, and to arrest the advance, of disease, and to give to the body the best opportunities for health and longevity. In this great physical work, let it be remembered, we shall not, to any great extent, succeed, unless our efforts be accompanied by equal efforts to carry out the higher and more important work of removing those impurities in the moral atmosphere, for which civilisation has much to answer, and with which the sources and spread of disease are closely—more closely, perhaps, than we think—associated."

LADIES' DRESS FOR TRICYCLING.

By Ada S. Ballin.

SECOND PAPER.

I described last week a dress invented for wear either for cycling or walking by Mr. Goodman, of Albemarle-street, who, I believe, is the only person who has given much attention to the subject of cycling dress for ladies. He has recently, however, devised two other costumes which serve the same purpose, but are to my mind prettier and more artistically constructed than the first. In Fig. 2 there is a smart jacket-body, the skirt being plain with a number of pleats inserted as a deep kilting in the front, partially concealed by a pointed apron. The pleats provide accommodation for the knee when it rises in working the machine, and they are utilised in the same way in the costume represented by Fig. 3. This dress is more like an ulster than a costume. The upper part of it is made like a Norfolk jacket to which a plain skirt is attached; a deep kilting is inserted the whole length of the skirt in front. There is something very *chic* about this dress, and it is suitable for rather cold or wet weather, when it may be used as a winter mantle, or to take the place of that valuable but ugly contrivance—the waterproof. Although so different in appearance, these dresses are all made with the same design, that of providing comfortable and healthy costumes for lady riders. This design has been excellently well carried out, and although in the pictures the bodies are represented as being rather confined in the waist, this fault is not to be found in the originals. Tight lacing must be banished from the mind and body of the woman who would ride the iron steed.

The ideal way of wearing Mr. Goodman's dresses is with woollen combinations next the skin, a flannel body fitting closely to the figure to take the place of stays, and buttoned on to this a pair of knickerbockers or trousers of cloth to match the dress. Of course, these unmentionables do not show; but a lady clothed in this way is better able to face the risks of accident than one in petticoats, which are liable to hamper her movements. Moreover, this method of clothing gives a sense of lightness and freedom which can never be enjoyed by one dressed in the ordinary way.

I venture to suggest myself that a sort of apron could very easily be made, with an accommodation for the knee in the middle, as in Mr. Goodman's invention. This could be put on when the lady mounts and instantly thrown off when she dismounts. For instance, if she were going to pay a visit or do some shopping, she could wear any dress she chose; she would at starting put on the apron, which would protect the dress from dust and mud, and while going into the house or shop she would simply leave it outside on her tricycle, to which it might be fastened.

It is very important that dresses for tricycling should be waterproof, or, at any rate, that the tricyclist should have protection against rain, which, in our fickle climate, needs always to be provided for.

In this connection, it is most satisfactory to learn that by being subjected to a process called "Warnerising"—a process discovered by an American lady named Warner—all kinds of articles of dress, from tweeds and cloths to silk hats, velvet, and lace, may be made "water repellant," so that rain can hurt neither them nor their wearers. To think that ordinary outdoor garments can thus be made thoroughly waterproof seems almost too good to be true; but it seems to be true, nevertheless.

All sorts of divided skirts are suitable for tricycle-riding, and rain-proof dresses may be made in this way. The new process of waterproofing is said not to impede ventilation.

Fig. 2.

Fig. 3.

The "Gossamer" waterproof, an American patent for which Messrs. Swan & Edgar, of Regent-street, are sole agents for England, makes an excellent accessory to the equipment of the tricyclist. Specimens of it were exhibited at the Health Exhibition and at the Stanley Show of this year. "Gossamer" waterproofs look like mackintosh, but are much lighter, and can be packed into a surprisingly small space. Messrs. Swan & Edgar make

from this material a very useful tricycle dress for ladies, to be put over the ordinary dress when a shower comes on. It consists of a double cape, with sleeves, skirt, and leggings. The leggings would be extremely useful to wear with any kind of waterproof; they are nicely lined with swan's-down, and very comfortable. The whole dress, with a hood or hat cover, can be packed in a small bag and hung on to the back of the machine ready for use. The Gossamer waterproof is cured in the sun, and does not stick together when wet or warm, like the ordinary vulcanised waterproofs. An ulster, which can also be used for tricycling, is made in the same material, as well as an apron intended to be fastened on the machine. These waterproofs have taken no less than six grand medals at exhibitions in different parts of the world. Seven or eight sizes are made in the leggings, which are to be strongly recommended for children's wear.

Another useful waterproof is made by Messrs. Abbott, Anderson, & Abbott, of Limehouse and Watling-street, London, and was exhibited at the recent Stanley show. It is cut straight, like an ulster in front, but in two parts at the back, forming a skirt, which fastens round the waist with elastic, and a cape which, being cut rather large, falls over the back of the tricycle-seat and keeps it perfectly dry. One of the advantages of this construction is that it obviates the chance of damage by slitting, which often happens to garments which are cut in one piece from top to bottom, owing to the strain on the material caused by bending forward in working the treadles. This garment is most convenient for carrying when not in use, as it folds up entirely into the hood. It is made in materials mackintoshed on one side and coloured alpaca on the other. There is a considerable choice of colours.

Boots or shoes for tricycling should be made to fit the shape of the foot, so as to be perfectly comfortable, not according to the present absurd fashion, which, instead of allowing that movement in the toes which should take place in walking, cramps them together into a mangled and deformed mass. The chief points to be observed in getting boots or shoes are that the toes should be broad, to allow full play to the toes of the foot; the heels, if any are worn, should be low and broad, and under the natural heel, instead of being a sort of peg pushed forward right into the middle of the foot, like the fashionable Wurtemburg heels. The waist of the boot, answering to the arch of the foot, should be, to a certain extent, elastic, and the boot, though it should not press in the slightest upon any part of the foot, should not be too large, or it will chafe both stocking and skin. The "Reversible" boots and shoes, invented and manufactured by Mr. John Branch, of 87, Bethnal-green-road, E., answer the above requirements very well, and are at the same time neat and pretty, and sufficiently fashionable-looking not to appear peculiar. I have worn them for several months, and am well satisfied with their comfort and serviceableness.

A special kind of shoe is made for cyclists by Messrs. Waterman & Co., of Bristol. These are provided with special ridges on the sole, so as to prevent slipping, and give a powerful grip on the treadles. They are also made with a detachable sole, which is a great improvement, as it would be most difficult to walk even a short distance in the soles just described. In this year's Stanley Show, Mr. Rile, of Fenchurch-street, exhibited his "Perfecta" cyclists' shoes. They are very flexible and the arch of the foot is supported by a steel spring they look as if they would be comfortable.

The great necessities for a healthy and comfortable tricycling costume are—first, that every article that can be made of wool should be made of that material, so that the perspiration may be properly absorbed and that the wearer may not be liable to chills. Woollen stockings, combinations, bodice, trousers, dress, and even gloves, should be worn, and the linings of the dress and trousers should be of flannel, as in Mr. Goodman's costumes; secondly, that the boots or shoes should be made according to the principles just now explained.

With proper care, and such protections against cold and wet as I have mentioned, tricycling may be rendered both possible and profitable in almost all weathers; and I hope that lady tricyclists will soon be as plentiful in our streets as they are now rare—at any rate, in London.

Scott's Midlothian Oat-Flour.—Messrs. A. & R. Scott, of Kingston, Glasgow, and Finsbury-square, London, have prepared a singularly pure and nutritious "Oat-flour," which bids fair to take high rank among the food products which are specially adapted for infants and invalids, and for the use of dyspeptics in particular, whose digestion is weak, and whose stomachs refuse to assimilate foods of ordinary kind.—Ed. Health.—[Advt.]

The antiquity of trade-marks has been traced by a contemporary to be almost coeval with the industry of the human race. It has been found that ancient Babylon had property symbols, and the Chinese declare that they had trade-marks 1,000 years before Christ. Gutenberg, the inventor of printing, won a lawsuit about a trade-mark, and the use of a distinguishing stamp was recognised by the English Parliament in 1300.

Shampooing Recipes.—A good shampoo for removing dandruff, &c., from the scalp may be prepared by dissolving borax in water, with or without the addition of a little carbonate of ammonium. Very generally, carbonate of potassium is used by barbers. The proportion of these salts is about half an ounce to the pint. A stimulating effect may at the same time be produced by the addition of some alcohol or bay rum. We think the following a very good preparation:—Borax, one ounce; carbonate ammonium, half an ounce; aromatic spirit of ammonia, one and a half fluid ounce; bay rum, four fluid ounces; water to make one quart.

A Few Facts for Anti-Vaccinationists.—While the deaths from small-pox, last year, throughout the entire German Empire averaged one or two a week, and never exceeded four, there died in Prague, a city of about 270,000 inhabitants, no fewer than 828 persons between January and June, besides 409 in the last four months of 1883. Between October 1, 1883, and March 31, 1884, 56 cases—nearly all children under five years of age—were admitted into the Polyclini Hospital wards, under Dr. Ganghofner. Of these, 52 were unvaccinated and 4 vaccinated, two of the latter, however, not until after infection. Of the 52 unvaccinated, 11 (21 per cent.) died; of the vaccinated, none. There is a strong local prejudice against vaccination, with which several medical men, we regret to say, sympathise. Buenos Ayres is a city of about the same size—namely, 287,000 inhabitants, and vaccination is unpopular and not compulsory. While the births in 1883 were close on 11,000, the total number of vaccinations and re-vaccinations was 8,643. The deaths from all causes were 8,248, or 28 per 1,000; and those from small-pox 1,487, or 5 per 1,000 of the population, and 18 per cent., or nearly 1 in 5, of the total deaths. In Prussia the mortality since 1875 has been from 0·34 to 3·62 per 100,000 yearly; in Austria, 5·57 to 50·83; in Berlin, in 1882, it was 0·43; and in Vienna, 108·29 per 100,000. Since 1875 not a single Prussian soldier has died of small-pox; in the Austrian army 10 to 47 per 100,000 annually; and in the French 2 to 27 have died.

Personal Health

"Be timely wise;
With health all taste of pleasure flies."—*Gay.*

FOOD AND ITS RELATION TO MEDICINE.

By W. M. Hepburn, M.D.

(*From the "New England Medical Monthly."*)

THIRD PAPER.

Speaking of foods used with the design of either eradicating the disease or controlling the symptoms, we would class alcohol and buttermilk.

It is especially here that drugs are used, but few foods are given with the expectation of direct medicinal effect.

Improperly given, they may very much add to untoward symptoms, or, improperly withheld, may decide an unfavourable issue. But that there are foods which find a place in this class is proven by the two I have mentioned. Buttermilk has undoubted efficacy in the treatment of urinary troubles. Why I know not, but the fact remains that cases unaided by drugs, or by bland diet such as milk, have begun to yield at once when fed upon butter milk. In some way it assists to reduce and eradicate the inflammation.

Alcohol is given with the expectation of controlling symptoms, and this it frequently does if given at the right time and in proper amounts. My authority for classing alcohol as a food is Dr. H. C. Wood, who says:—"These concurrent investigations certainly demonstrate that but a small proportion of ingested alcohol is either eliminated from or accumulated in the body, and, consequently, that it must be oxidised in the body, and in some degree partakes of the nature of a food." Do not understand me to advocate the use of alcohol as a regular accompaniment of our meals, but simply as a medicinal food, to be used only in disease, and that, too, of an acute or incurable form. I do not know what medicine could fully supply its place in low typhoid conditions.

In these cases one often has the pleasure of seeing the tongue change from dry to moist, the pulse from but faintly perceptible to less frequent and strong; in fact, I think I have seen patients snatched from death's cold grasp by this more than all other drugs put together.

It is a food which given at the right time and in proper amounts, though not eradicating the disease, certainly helps most efficiently to control symptoms and brace the system for a prolonged struggle.

It is of the place food takes in the repair of tissues that I wish particularly to speak. In acute attacks such as lung-inflammation, for example, we have indications for certain kinds of food.

We need fat to supply fuel for the extra amount of combustion. It is the "feeding fevers" which Dr. Graves acknowledges to be the suggestion of a country physician.

We also need nourishment to give support to the prostrated body. At the same time it is essential to give easily digested and assimilated diet, or we will add much to the irritated and exhausted condition of the patient. Milk is the food *par excellence* in these troubles. It contains all the necessary ingredients in the most digestible form. But chronic cases may call for different treatment.

Let us take chronic diarrhœa for an example.

Now here we do not usually have a very exalted temperature; the patient, at the same time, is housed, warmly clothed, or wrapped up in bed. He needs, therefore, but little combustible material. What he needs is digestible, perfectly-assimilated food, of a kind which will, if such a thing be possible, repair the damaged tissue. Nitrogenous food is certainly strongly indicated; but the effort to get easily-digested nitrogenous diet has not always been successful. Beef-tea and its analogues should, as we have been told, "be reckoned as of little or no value," "water and pressure not only fail to extract the alimentary principles from meat, but the excrementitious principles, or the products of destructive assimilation, are thereby extracted, hence, not very inaptly, beef-tea has been compared to urine." Many of the liquified meat preparations are not at all palatable.

To my mind, the best preparation of beef ever presented to a patient is the "Salisbury Steak." It is certainly as digestible as meat can be made. It is palatable, fresh, and can be prepared at any time. It is gently boiled, which adds to its digestibility, and gives it a pleasant taste, especially if a little salt, pepper, and butter be added. Is there such a thing possible as repair of tissue? That is, to take the disease we have just spoken of, if a bowel has been for a long time inflamed, leading to structural change, such as ulceration or fibroid, can that bowel renew itself? We see the lungs recover from an acute inflammation, either by fatty degeneration and absorption of what has been thrown out, or casting off by expectoration. So acute kidney-disease is frequently followed by restoration of structure.

Bones properly set, after a break, unite and are as good as before the fracture.

But even more, we have seen such striking examples as the remarkable case of Dr. James Wood, where, by saving the periosteum, or bone-sheath, a new lower jaw was grown. I do not fail to remember that in chronic diseases, such as "drunkard's liver," we have the normal tissue substituted by fibrous growth, and that most physicians would look upon the suggestion as absurd in the extreme which should be made as to any organ casting off this morbid tissue and renewing itself with normal structure.

Nor do I mean to assert that it can be done. But this I say, that remarkable improvement has taken place in cases of suffering from these diseases, and in the treatment a diet of exclusively nitrogenous food has been used. It seems to me this is rational. We are told that "repair is but the repetition of growth." We do know that the nitrogenous principles are the "repairing" portions of the food. Drugs are entirely secondary here except those which aid digestion. We do not give a child medicine to grow.

We recognise these truths in the treatment of acute diseases.

As soon as the disease has spent itself we put the patient on tonics and nourishing food. Why not recognise the same plan as the true one in treatment of chronic troubles?

Here is a liver chronically inflamed from too free indulgence in alcohol. We recognise the disease and the cause of it. Having got rid of the cause, the one thing left to do is to enrich the blood, and so sustain the strength and, if possible, renew the tissue. In chronic more than in acute disease, after controlling symptoms and eradicating the disease, the question of diet presents itself.

In acute attacks the digestion, with the rest of the body, usually rapidly recovers itself, but in chronic cases

To Inventors.—Inventions protected by Royal Letters Patent at lowest rates. Provisional protection for nine months, £2. For all information concerning Patents address Messrs. Lulman & Co. Patent Agents, 8, Essex-street, Strand, London, W.C.—[Advt.]

Buchan's Patent Prize Medal I.C. Exhaust Ventilators. The best in the market. Illustrated Price Lists free from W. P. Buchan, S.E., 21, Renfrew-street, Glasgow.—[Advt.]

primarily or secondarily the digestion becomes impaired, and but slowly returns to its normal condition, and on the digestion depends all hope of benefit, be it heart or kidney, liver or lung. I think we often forget this, and in using a drug for its alternative, stimulating, blood-vessel-contracting, or some other property, we fail to see the havoc it is doing in other directions. Eager to gratify ourselves by getting constitutional effects of a certain kind from a certain drug, we blind ourselves to untoward symptoms which more than counteract the good we accomplish. What, then, are our conclusions? Simply these: that for every type of any disease there is a food which most fully meets the wants of the system; that in all long-continued diseases the food is an essential factor. That with few exceptions, whatever the disease, the drugs should never be allowed to destroy or decidedly impair the digestion of food, even if it necessitate the exclusion of some drug of real efficacy to that particular disease; and that in the repair of structure, the disease having spent itself, food is the essential factor, with the addition of such drugs as will stimulate the glands, or artificially add to the digestive juices. And lastly, that in patients with naturally poor digestion, judgment as to the *proper amount*, as well as the quality and frequency is needed, for on that judgment often hangs a favourable or unfavourable issue.

Mustard pencils (*Crayons Sinapismes*) have followed the menthol pencils in Germany. They are recommended to produce counter-irritation by rubbing behind the ear in face-ache, on the temples in headache, and on any affected part for rheumatism.

Oilcloth must be wiped perfectly dry as it is washed. Use little soap, and this in tepid water; change often. A good brush and a piece of dry flannel will make oilcloth look like new, especially if linseed-oil or skim-milk be well rubbed in after washing. If, in addition to these precautions, they are varnished annually, they are almost indestructible.

Aniline Dyes.—Some weeks ago, a discussion arose respecting the hurtful properties of many aniline dyes when used for staining articles of dress and house-furniture. We then referred to the intermixture of arsenic with the aniline colour as probably blamable, in part at least, for the faults attributed to the latter. A paper read by M. Napias, before the Paris Society of State Medicine, on Nov. 26, has also an important bearing on this subject. M. Napias has found that workers in artificial flower-making, who use a large quantity of aniline dye, are apt to suffer from symptoms of lead-poisoning. This is particularly true of those who use "geranium-red," by means of which a carmine hue can be obtained at a fraction of the cost of that derived from cochineal. Geranium-red is an eosine lacquer, containing 20 per cent. of lead. It is, therefore, easy to see how the air of a work-room may quickly become poisonous to a dangerous degree by being laden with particles of this nature. M. Napias further alludes to the lesser troubles of the nature of coryza which arise from the inhalation of eosine-dust, and which are due to the bromine contained in it. Erythemata also are apt to be produced by the manipulation of this substance, as of others like iodine, which are not dangerous poisons in the ordinary sense; and such eruptions are ascribed by this observer to the nitrogen in the aniline colour. These lesser evils, of course, are dwarfed in the presence of lead-poisoning. As a remedy for the latter, M. Napias recommends the substitution of alumina for lead, since the former gives a similar dye without the risk of injury to those who handle it.

Public Health

"Health is the first Wealth."—*Emerson.*

OUR AMBULANCE LECTURES:

What to do in Emergencies and Accidents before the Doctor comes.

By Various Writers.

IX.—UNCONSCIOUSNESS AND THE TREATMENT OF FITS.

By Dr. Andrew Wilson.

A man is found unconscious and insensible by the wayside; or he suddenly loses consciousness and falls helpless in the street. In such a case, the ambulance student has first to address to himself the question, "What is the cause of the insensibility?" seeing that his treatment of the patient will be guided, as a matter of course, by the symptoms exhibited. Loss of consciousness, it should be noted, may be due to one or more causes out of a considerable number, and we must endeavour to ascertain the exact nature of the injury, or it may be disease, from which the subject of our attentions is suffering. It is not always an easy task to "diagnose" or discover the cause of insensibility in the patient to whom we have been called. Even trained medical men may sometimes hesitate before pronouncing a decided opinion regarding the nature of the ailment or affection which produces the loss of consciousness. But there are certain general rules for treatment, which, when we are in any doubt, may be safely followed, and the ambulance student may, therefore, be able to do much to relieve the patient, to make him comfortable before the doctor arrives, or to restore sensibility, if the case should prove to be of simple character.

Allied to the question of the loss of consciousness is the subject of "fits." These ailments are, as often as not, followed by insensibility; so that the treatment of the latter condition naturally merges into the rules for the relief of "fits" themselves.

Loss of consciousness and a state of insensibility, we may firstly note, may be due to one or other of the following causes:—(1) Drunkenness and the stupor of alcoholic poisoning; (2) an ordinary fainting fit; (3) an epileptic fit; (4) an apoplectic fit; (5) narcotic poisoning, as by opium, &c.; (6) Uræmic poisoning, or that arising from kidney disease; (7) injury to or concussion of the head and brain. It is clear that the discovery of the exact cause of the insensibility may, therefore, be a difficult task, but it is one in the exercise of which we are guided by certain simple rules, tolerably easy of remembrance. To the list of "fits" must also be added the "hysterical" fit, which, if only from the simplicity of treatment, deserves mention at the hands of the ambulance instructor.

A primary rule, but one which, in my experience, needs to be over and over again impressed upon the public and police alike, is that an insensible man, *unconscious from whatever cause*, is to be treated carefully and gently, and is a subject in no case whatever for the police-cell, but for the hospital. If the unconscious man is taken to a police-station, as the nearest accessible place of relief, under the wise regulations of the Home Office, a surgeon will now be called in at once. But it is not so long ago that the police occasionally acted in a highly reprehensible

Sanitary Inspections.—Fee for Survey and Report, in London 2 Guineas. Estimate given and Improvement Works carried out when required.—The Sanitary Engineering Co., 115, Victoria-street, Westminster, S.W.—[Advt.]

manner in cases of insensibility to which they might be called. The phrase "Drunk or dying" was one too often seen as the heading of a sensational paragraph in the public newspapers, describing how a man, conveyed insensible to the police-station, was charged with drunkenness, placed in a cell, and, when visited later on, was found to be dying, or even dead. Post-mortem examination in these cases usually revealed apoplexy or other ailment as the cause of death. Here the police defence has been that the man smelt of liquor, and that his appearance was suggestive of a debauch. But when we reflect that a man who had taken an overdose of alcohol might, on reeling out of the public-house, be seized with apoplexy—a not uncommon occurrence in drunkards—we may readily enough see why the mere smell of liquor, apart from any other symptoms, is no warrant whatever for treating a man as an unconscious sot. Even were the man unconscious from drink alone, he is still a subject for the doctor, and not for the police. Alcoholic insensibility is a grave condition. It is, in fact, one of poisoning, and requires to be treated as such. Therefore the rule that the insensible man is, in all cases, a subject for the doctor's care, should be made an inviolate regulation in the work both of the police and of all other persons who come in contact with such accidents. Much blame, misery, and regret would be saved were this rule made, as it is in all ambulance instruction, a fixed and unalterable regulation.

It is well to add here two cautions in dealing with cases of insensibility—namely, that *no fluids are to be given by the mouth in any case of insensibility;* and, secondly, that the exact position and surroundings of the patient should be clearly noted when we are first called to render aid. In instances involving injury and serious assault we may be able, through such observations, to afford assistance in unravelling the nature of the case. Disordered dress, broken watch-guard, bruises on the face and so forth, might, for instance, lead us to strongly suspect assault and robbery, and cause us to examine the head at once for traces of brain-injury.

The signs of (1) *drunkenness which has produced unconsciousness* are, firstly, the strong odour of drink exhaled from the patient's lungs and body generally; the face is bloated as a rule, while the complexion itself is pale; the pulse is weak; breathing is slow and feeble, and is often of a "stertorous" or snoring character; while the pupils are generally dilated, but may be contracted or even unequal. Apoplexy, to be presently noted, is very apt to be mistaken for this condition. Loosen all the neck-clothing in the first instance, and make the patient comfortable. If medical aid is not at hand, and the patient seems in danger of sinking, in a case of insensibility from drunkenness, vomiting should be induced to clear the stomach, while, as the patient is in a state of collapse, heat is to be applied outwardly and inwardly.

The (2) *ordinary fainting fit*, which, as a rule, is not by any means a serious matter, nevertheless is calculated to cause alarm, more especially when the fit occurs in a church or other crowded assembly, and where the patient has to be carried out of the building and treated promptly. The causes of the ordinary faint (or *syncope*, as it is medically termed) are fright, or other violent mental emotion, heat, digestive disturbance affecting the heart's action, the sight of blood or of accidents, and, it must be added, tight-lacing. Apropos of tight-lacing and its treatment, there is an incident related in a well-known essay by the late Dr. John Brown, of the canny church beadle in the north, who provided himself with a clasp-knife, and prepared himself, at the doctor's command, to cut the stay-laces of fainting maidens, with the inquiry, "Doctor, will I rip her up noo?"

The beadle's mode of procedure, in reality, gives the clue to the treatment of the fainting-fit, and it should be borne in mind that *a safe rule to be followed in all cases of insensibility is that of loosening all the neck clothing, and of removing all tight clothing likely to impede the free play of the chest. The mouth should also be examined in cases of insensibility*, so as to make certain that no impediment to breathing exists. A case of choking might result in speedy loss of consciousness, and only the examination of the mouth might reveal the true cause of the accident.

The symptoms of the ordinary fainting fit are easily distinguished. The face is pale and the skin cold; even the lips seem pallid and bloodless; the pulse is very feeble, and insensibility rapidly supervenes. Now, the cause, direct or indirect, of the fit is slight temporary failure of the heart's action. The feeble pulse shows this latter character. Hence, as the heart is performing its work with difficulty, and as the brain is not receiving its due supply of blood, all our efforts must be directed to aiding the heart's action. The common method of treating a fainting fit is to set the person *bolt upright. This is a grievous mistake.* In some cases, lives have been sacrificed to this error. In persons with affected hearts, fatal syncope may occur by the sudden placing of the body in the erect posture; whereas, by laying them flat, and by keeping the head low, recovery is promoted.

In a case of fainting, therefore, carry the patient at once into the fresh air, lay him flat, so as to assist the heart's action, and so as to give it less work to do in circulating the blood. *Loosen all neck-clothing*, as already indicated. If a tendency to fainting is experienced, the person should bend the head down between the knees. I know a person who is somewhat subject to such attacks, and who, if in church or elsewhere, drops a handkerchief, and then, bending low to pick it up, succeeds in recovering without attracting undue notice. Smelling-salts may be applied to the nose to aid in the recovery. Burnt feathers form an old-fashioned remedy, on account, presumably, of the irritating nature of their fumes. Cold water may be applied to the face, and, where recovery is long-delayed, a dash of cold water applied cautiously to the chest may be of service. A little brandy may be given after recovery if the patient feels much exhausted. Quiet and rest for an hour or two afterwards should be enjoined.

The treatment of the other varieties of fits and of unconsciousness from other causes will be noticed in our next article.

Notice.—Pure, dry natural Sherries, free from extraneous spirit, suitable for invalids, are imported, bottled, and delivered, carriage free, by Messrs. Platel & Son, Merchants, Brixham, at 20s. per dozen. These wines were favourably noticed in the number of Health for August 1, 1884, and references can be made to purchasers in all parts of England.

Recipe for Bleaching Sponges.—To those who may have any soiled or dirty sponges, the following process can confidently be recommended, if properly performed. One thing is essential for a good result, viz., that the sponges must not be left in any of the solutions too long a time:—First soak them in a solution of muriatic acid, made by adding one pint of acid to one gallon of water. This is to dissolve out limestone, &c. Rinse thoroughly, and immerse in a solution of permanganate of potash (one ounce of the salt to one gallon of water). Wring out the sponges and immerse in a solution consisting of one pound of hyposulphate of soda, one gallon of water, and one ounce of muriatic acid. Then wash well to remove all traces of acid, wring out, and finally dry.

The Family Circle

"The child is father of the man."—*Wordsworth.*
"In bringing up a child, think of its old age."—*Joubert.*

A MEDICAL VIEW OF THE CLIMATE OF NELSON, NEW ZEALAND.

Dr. Hudson contributes to a medical contemporary the following instructive account of the health-aspects of Nelson, N.Z. The description will prove of interest to all who contemplate visiting these islands:—

The object of this short note is to give medical men and others in England an unbiassed idea of the suitability or otherwise of this climate for certain classes of disease. Speaking generally, the climate of Nelson may be described as warm, temperate; and it differs markedly from any other locality in New Zealand in the small amount of wind. New Zealand in general is decidedly windy, especially Cook's Straits; but Nelson, although in close proximity to the most windy part, has less wind than most places on the globe. This is one important reason that renders it a good place for pulmonary disorders.

The following are the chief directions of the wind and the associated weather:—North-east, warm and rain (usually); north, sea-breeze in fine weather; north-west, gales and high tides; west to south, the so-called "Waimea" or "spirit" wind, very characteristic of Nelson, usually blows hard during the day, dying down to a perfect calm at night; always a very dry wind; south-east, squally and cold in winter.

On reference to a map, Nelson may be seen to lie at the head of Bluid Bay; and it is completely shut off from the colder southern regions by ranges of mountains. This absence of wind is somewhat relaxing, especially in summer; healthy strong people feel enervated by it, but it is this very point which (in my opinion) renders Nelson (the only place in New Zealand) a suitable climate for the phthisical.

As regards rainfall, about forty-five inches fall per annum, and it is distributed throughout the year; July, August, November, and December are the wettest months; January, February, and March the driest. Thunderstorms are remarkably unfrequent; they mostly occur in winter, accompanied with south-east weather. Fogs are exceedingly rare down on the flat, though the hill-tops are very commonly obscured by mist and cloud. During the four years and a half I have resided in Nelson, I do not remember one single fog down on the flat; this is another point of difference from many other places in New Zealand.

The subsoil varies much. This is not to be wondered at in a country so hilly, and which has in former times been much disturbed with earthquakes. In some places it is clay, in others, gravel; of course, the latter are to be preferred, for sanitary reasons. With regard to earthquakes, slight shocks are not uncommon; according to the old settlers, they are not nearly so severe as they used to be. There are extensive mud-flats near the town, between tide-marks; they are covered by the sea every twelve hours, and I have never been able to trace in them a distinct source of disease. In time, no doubt, they will be all reclaimed and brought under cultivation.

The average winter (May to September) temperature taken from 8 to 9 a.m., is 40°; the average summer (December to March), 60°. In the shade, even in the hottest weather, it seldom rises above 80°, and the minimum winter temperature at night is not often below 30°, though occasionally such minima as 25° or 23° do occur. The sun's heat in summer is very great, and, were it not for the sea-breeze, which always blows in proportion to the heat of the sun, the temperature in the shade would be very much higher than it is. The sun's heat, even at midday, is never sufficient to deter people from walking or working out of doors. The sun's heat in winter is a delightful temperature—in fact, a fine winter's day in Nelson is the perfection of weather. Children play about on the shores in the same way that they do at an English watering-place in summer; and a strong point in favour of the climate is, that there are a great many such days.

The diurnal variations of temperature are pretty extensive, and this holds, not only as regards the difference between day and night (often as much as 30°), but between one day and another. I have occasionally observed a difference of 20° between the temperature on one day and that at a corresponding time on the next. These sudden variations are trying to many constitutions; they are, however, observed all over New Zealand.

Nearly all plants that grow in Great Britain flourish in Nelson. Owing to the small area of flat land near the town, agriculture is far behind other New Zealand districts; but fruit and hops are largely produced, and are important industries. Unfortunately, the mildness of the climate not only favours the growth of plants, but also of insect-blights, of which there are a great number, and they are very destructive.

With regard to the diseases of Nelson, one thing to notice is the absence of malarial fevers. I have never seen a case of ague, and cannot hear of one having ever occurred here. There is, however, a good deal of periodic neuralgia, which yields to quinine, and so this may be its representative. Dysentery is not uncommon; it is, however, seldom fatal. Pulmonary (or lung) diseases, here as elsewhere, are frequently met with. I have seen several cases of consumption originating in the district in people born here. The climate is not a specific for consumption, but it is undoubtedly beneficial, especially for cases that have originated in a bleak, cold climate such as the United Kingdom. The proportion of lung diseases is decidedly less than in the old country. Heart disease is rather common, owing to the relaxing effect of the climate on the muscular tissue of the heart. Surgical cases generally do well, probably owing to the pureness of the atmosphere and the accompanying absence of germs. Goître (or enlargement of the thyroid gland of the neck, usually arising from the use of over-hard water) is rather common amongst the young people born here, especially the girls, and is, I believe, due to the proximity of the hills. Nelson may be regarded as a valley surrounded on three sides by hills. The water-supply is excellent.

In conclusion, the chief characteristics of the climate of Nelson are the large amount of fine, bright, sunny weather and the very small amount of wind.

Scott's Midlothian Oat-Flour.—There is no preparation which can be assimilated with greater facility than such a flour as this. Those who suffer from indigestion might substitute for their ordinary breakfast materials this flour, prepared according to the recipe given by Messrs. Scott and printed on the tins.—Ed. Health.—[Advt.]

Welsh Mineral Waters.—The Welsh group of minera waters, of which Llandrindod is the chief, has been rapidly growing in public favour. The accommodation at that place has been quite outstripped by the number of visitors. This has encouraged the foundation of an enterprise which proposes to build a large hotel on the wooded slope above the springs and looking down on the little lake.

Jottings from the Journals.

"Th' ingredients of health and long life are
Great temperance, open air,
Easy labour, little care."—*Sir Phillip Sydney.*

Guy's Hospital on the Stage.—In "The Last Chance," a drama by G. R. Sims, now being played at the Adelphi Theatre, one scene represents the part of Guy's hospital where the convalescent patients delight to breathe the fresh air under the plane-trees. The view, by Mr. Bruce Smith, represents the clinical ward and the old fountain on the left, and the sun-dial on the right, whilst the new building, or Hunt's House, forms the back-ground. This the artist has treated with some licence, making the upper stories of red instead of yellow brick, in order to give a warmer background to the scene. Sisters in the Guy's uniform—blue, with white aprons and caps—and nurses in pale prints, come among the patients, who appear very contented and happy. One convalescent declares it to be "the noblest institution in the whole world," and a little girl begs to be always allowed to remain there instead of being sent back home, a request one has often from children in hospitals. Some students are also present, apparently very intent upon reading the newspaper. They might with greater truth have been represented carrying down on stretchers patients too ill to walk, a service they are never tired of rendering during the summer months. The only sign of discontent in this pretty scene is that of the gossiping old chronic rheumatic, who pursues a doctor out of the grounds with the request that she may have stewed eels instead of fried sole. Mr. Sims has done good service in representing a hospital in its true light, as the greatest of boons to the poor, where they are sure to meet with kindness and skilled assistance when injured or ill. He has, moreover, produced a most interesting play, which is filled with thrilling incidents, yet never reaches the overclimax of a murder or suicide, but ends with a touching scene and a true dramatic situation.—*British Medical Journal.*

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"Why not Eat Insects?"—A great divine has told us that the maxim of creation is "Let us prey." We are not, however, prepared to carry this principle so far into practice as to rob the poor birds of their food. Beyond question insects were made for birds to eat; or, to put the fact in another form, birds were intended to eat insects. Man may eat birds, but not bird's food. Mr. Vincent Holt—who for some mysterious reason has set himself to convince mankind that, as we are hereafter to be preyed upon by the worms, we ought to "take it out" of the worms while we can—argues colloquially thus: "Them insects eats up every blessed green thing that do grow, and us farmers starves. Well, eat *them* and grow fat." We prefer a more logical and comprehensive policy, and as the insects eat the green things, and the birds eat the insects, we will eat the birds. It would not simply be cruel to the birds, but flying in the face of nature, to interpose between them and their food; more particularly as by passing through their bodies and becoming birds' flesh insects are brought nearer to our own standard of tissue. If Mr. Holt will only sit down for five minutes and think the question out in its economic as well as its dietetic bearings, he will agree with us that the course of conduct he prescribes would be as irrational as taking to eating grass ourselves instead of feeding on that delicacy by proxy, and afterwards eating our agents in the shape of mutton and beef. If the principle on which Mr. Holt reasons were carried out to the bitter end, there would be an end of intermediates altogether, and we should take to living on carbon, oxygen, hydrogen, and nitrogen, with a little sulphur, instead of boiled eggs, for breakfast, which, to say the least, would be both disagreeable and inconvenient. If anything could possibly induce us to eat insects, it would be Mr. Holt's elegant *brochure*, got up with persuasive taste by Messrs. Field & Tuer; but we decline. "Why not eat insects?" Because the idea of devouring slugs, spiders, and centipedes, not to mention other more horrible monstrosities of the edible insect class, is revolting. Life would not be worth living at the price. In dire straits of famine men and women may bring themselves to devour rats and mice and slugs and caterpillars; nay, in such matters, these creatures might come to be considered delicacies. But there is not the least reason why we should, in pure wilfulness, take to filth as food while clean things that do not creep are to be obtained. Therefore we say if "these insects eats up every blessed green thing that do grow and us farmers starves," let "us farmers" be a little less hard on the birds, and then, instead of being compelled to eat the insects, the birds will do that for them, and they can eat the birds.—*Lancet.*

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Baldness in Eastern Nations.—Herr Schweiger, writing from Widdin, refers to baldness amongst Orientals. In Europe the idea is general that baldness is the prerogative of scholars; in the East, on the other hand, it is the common characteristic of two races—the Spanish Jews and the Turks, whose nervous system has never been overwrought by any devotion to serious studies. In some measure to explain the origin of this phenomenon, we must commence at the cradles of the two peoples living side by side. The indolence of Oriental women is well known and is manifested in sins of omission rather than of commission. The Oriental mother neglects the principal duties to her offspring. During the first eight days of its earthly career the infant is sprinkled with a little tepid water once a day by some old woman, then wrapped in coloured rags to save the trouble of frequent changes, the head being wrapped in a well-wadded cap tied under the chin. This process is repeated during the succeeding weeks once every two days, until finally it has become too toilsome, even for this repetition, and is abandoned altogether, through fear, it is said, that the child would catch cold from frequent washings. Superstition has added its force to laziness, for the women believe that the head of an infant should never be washed, as the scab produced by the dirt is good for the eyes. This dirt, mixed with the secretions from the sebaceous and other glands, becomes the home of numerous animal and vegetable parasites, which prevent the development of hair and destroy that already grown. The open air, which might assist in destroying these parasites, is, however, carefully excluded by the custom which is imperative among Semitic peoples, of never, by day or night, or upon any occasion whatsoever, taking off the head-covering. At night the fez is changed for a linen cap of similar shape. This perpetual covering naturally retards the growth of the hair, and transmission and propagation do their work. Herr Schweiger, who has lived in the East for many years, first noticed chronic baldness amongst the lower classes of the Turks, especially the so-called Spaniols of Salonica.—*Nature.*

A TRADESMAN having bought a door-mat with the word *salve* (welcome) in the centre, a country relative, on seeing the mat, remarked: "I say, Cousin John, what kind of salve is that you advertise on your door-mat?"

Our Bookshelf

"Reading maketh a full man."—*Bacon.*

A BOOK ON CONSUMPTION.

The Curability and Treatment of Pulmonary Phthisis. By S. JACCOUD, Professor of Medical Pathology to the Faculty of Paris. Translated and Edited by MONTAGU LUBBOCK, M.D., &c. (London: Kegan Paul & Co. 1885.)

THAT fell disease known as pulmonary (or lung) phthisis, or consumption, always awakens an intense interest when discussed either in medical circles or by the laity at large. People have come to know more about consumption than wellnigh any other disease. Its frequency, its often wellnigh hopeless nature, the apparent mystery attending its inroads, and the topic of its transmission through the blood from one generation to another, form so many phases of the disease which appeal in a forcible manner to the popular culture of the time. The public are now being led, and happily so, to take a deep interest in aspects of medical matters to which in former years they were utter strangers. Health-culture is making itself felt, surely if slowly, in its influence upon public inquiry into the causes of disease. The cure of diseases will always form the special province of the physician and surgeon. The prevention of ailments is the province of the units or individuals of which society is composed. Hence, in relation to the topic before us, we hail with pleasure the publication of the work under review, since, while it contains the fruits of extensive medical experience, it also teems with information, which the lay reader can readily understand and digest. Above all, the topic of the curability of consumption, in which the interest of the subject is centred, is treated in the work before us at great length. If only for the valuable hints given in the pages of Professor Jaccoud, regarding the curability of the dreaded lung trouble, we may well feel grateful to this eminent French physician, and to his translator, Dr. Lubbock, for their labours in placing this excellent manual under the notice of the professional and lay public alike.

Professor Jaccoud has well merited the distinction of being regarded as one of the foremost continental authorities on consumption. In the work before us, he details the fruits of a long and extensive experience, which, backed up by powers of acute observation and readiness in marshalling facts and drawing inferences, has enabled him to produce a work of thoroughly reliable character. Naturally Dr. Jaccoud leans to a particular view of the causes of consumption. He entertains, likewise, very decided views regarding its curability. For example, Jaccoud is strongly of the belief that the ailment is infectious. He goes further still, and asserts that *tubercle* (or the general condition of which consumption of the lung is one form or variety) may be self-infectious as far as the individual is concerned. In other words, given tubercle-matter in one part of the body, he maintains that this matter may be carried to and infect other parts and organs.

Again, our author lays it down as a primary rule of his teaching that consumption is essentially caused by conditions which interfere with the proper nutrition of the body. This is the fundamental proposition of his teaching. Want of due nourishment, and the operation of conditions which, so to speak, lay the body open to the charge of being unable to do the best by its food, are the agencies which open the gate of the living citadel to the foes of the lungs and other organs. No less distinct are his teachings in the matter of the prevention and curability of consumption. Jaccoud holds that the disease is preventible in a high degree. He is equally forcible in his declaration of its curability in all its stages.

His teachings, it will thus be seen, constitute a kind of medical gospel of hope, and were it not for the fact that he backs up and strengthens his opinions, as already noted, by the fruits of a long experience, the author might well lay himself open to the charge of an over-sanguine view of the whole subject of lung-trouble and its cure. For him imperfect nourishment starts the disease, and then come the works and ways of inflammation to aid, advance, and complete the process of destruction. Very early in the book Dr. Jaccoud sounds the keynote of his views. "The origin of true tubercle," he says, "is the result of debility." He proceeds next to urge the further thought that "common forms of accidental irritation of every kind affecting the larynx (organ of voice), bronchial tubes, or lungs, have a deleterious effect upon tuberculosis and phthisical (or consumptive) lesions." Thus, the inhalation of dusts—*e.g.*, steel dust, coal dust, stone dust, &c.—would be regarded by Jaccond as powerful causes of lung-troubles, and, of course, the common experience of life shows this observation to be only too true. Another proposition of the author's is, that "fever is a process of consumption;" and in a few sentences later on, he adds: "I now commence the consideration of my subject, after warning all against the too wide-spread opinion that pulmonary phthisis is an incurable disease."

Dr. Jaccoud's work appeared before the discovery of Dr. Koch of the *bacillus*, or lungs germ, which is found to be associated with consumption. But with the discovery in question his previously-announced opinions are in harmony, and his views regarding the infective power of the disease are, of course, fully substantiated by the discovery of the German scientist just named.

In the consumptive lung, as most people know, there is a tendency to the formation of "cavities," through the wasting of the lung-substance under the influence of the disease-principle. Jaccoud points out that as these destructive changes are watched, one or other of two processes appear to predominate, and to influence the history, curable or fatal, of the case. There is a process of softening—*caseation*, it is technically named—which occurs in the centre of the diseased part, and a process of fibrous development which occurs in the margins of the affected spot. There is, in fact, a contest or battle between the two kinds of "growth" in the diseased area of the lung. If the softening gains the day, the outlook is of the worst description. If, on the other hand, the fibrous growth should come to the front, the case is hopeful, and its cure possible. If the diseased area developes the fibrous and stouter tissue, the ailment is practically cured. And so it is to the encouragement of such an end in the consumptive lung that medical treatment is to be directed.

According to Jaccoud, there exist marked differences between the degrees of curable power which different cases of consumption exhibit. He maintains that a distinction should be made between those cases in which the disease has been acquired in early life (between 15 and 35) and those in which it has appeared between 35 and 40, or at a subsequent date. He holds that, if a person previously healthy acquires consumption late in life, it "may be controlled more decidedly than any other form of the complaint by appropriate treatment." Repeated chills are the chief causes of such cases, together with excess of work and poor living. The disease here runs a slow course, and is the more easily controlled. Where, on the other hand, the disease is

acquired through a weakened constitution (*e.g.*, as in the case of scrofulous persons) it is not so readily cured, while, at the same time, it is infinitely less formidable than the form in which it is inherited or born with the patient, so to speak.

The importance of this book, however, demands a more extended notice of its views regarding the treatment of the disease, and to this subject we shall return in a subsequent paper.

SHORT NOTICES.

Edinburgh Health Lectures for the People (5th Series). Edinburgh: Macniven & Wallace. 1885.)—This volume contains seven lectures delivered to large audiences in the Scottish capital during last winter. The lectures will be welcomed in their collected form by wider audiences than those to whom they were addressed. Where so many excellent lectures are included in one volume, it may be invidious to particularise one over the others; but we are glad to observe the subject of "Marketing and Cookery," treated by the Edinburgh School of Cookery; and the "Adulteration of Food," by Mr. J. Falconer King. Dr. Ritchie's lecture on "The Bath" is also excellent in its practical bearings; but we could have wished to see that of Dr. Bramwell on "Causes of Disease," &c., less discursive than it appears in the present form.

Sanitary Appliances, Etc.

BARNES'S IMPERMEABLE CARRAGEEN POULTICE.

We have had occasion to refer on a former occasion to the handy inventions of Mr. Barnes (of Trevor-terrace, Knightsbridge, London, S.W.), in the shape of "poultices" capable of being kept for any length of time, of being instantaneously applied, and of forming cleanly and efficient applications for the relief of pain. The present poultice is supplied in rolled form, the material (Irish moss, or Carrageen) combined with Thymol, being spread on gutta-percha or impermeable material, through which moisture will not pass. All that is needed to be done in applying the poultice for use is to dip it in hot or cold water, to lay it on the part, and to secure it with a handkerchief or other bandage. The usual "mess" which attends the application of ordinary poultices is thus entirely avoided; the comfort of the patient is proportionately increased. The advantages of such a poultice for travellers' use, for the medicine-chests of ships, and for many other purposes, are readily appreciated.

PERKINS' SANITARY PANS.

Messrs. B. Perkins & Son, of 141, Cannon-street, London, E.C., have introduced into the market highly-satisfactory inventions in the shape of saucepans and stewpans, constructed on principles which exhibit a decided improvement upon the ordinary type of such utensils. The "Sanitary pans" are constructed of seamless steel, and are thickly coated inside and out with refined tin. Even when the tin in course of time wears off, the pans (which can be repaired at trifling cost) are still perfectly safe to use, and exercise no influence of deleterious character on the food which is cooked in them. The common copper pans, with their always dangerous tendency to poison the materials cooked in them, should thus be superseded by these steel pans, which, we may add, were not only used by the School of Cookery at the late Health Exhibition with complete success, but also by Messrs. Bertram & Roberts, the refreshment contractors, and obtained the well-deserved award of a silver medal. The durability of these pans is a feature of which careful and economical housewives should make a note, while their original cost is even less actually than the common pans, and much less relatively when the durability and lasting power are taken into consideration.

To the ordinary enamelled iron pans the "Sanitary Pans" are equally superior in all ways. The chipping off of the enamel and the poisonous character of this substance are equally avoided by the use of these steel utensils, while, for the manufacture of many sauces, and invalid dishes especially—in preserving the absolute purity of fluids cooked in them—is a feature which should not be lost sight of in connection with the use of these pans. A point which also deserves mention in the matter of Messrs. Perkin's "Sanitary Pans" is their practically unbreakable character. For economy, wear, and safety, we are of opinion these utensils are simply unrivalled; and a somewhat lengthy experience of their use enable us to testify with increased power to their eminently satisfactory character. We have also received independent testimony to the excellent character of these pans, which we cordially recommend to our readers who value sanitary cooking as a primary condition of health.

NEW MEDICAL AND SANITARY PATENTS.

1856. Soil or Drain-pipes (*H. Lake*, London).—The hand-holes for inspection and cleaning are elongated in the direction of the length of the pipe. By this, inspection is rendered easier than in the old form of a small oval hole.

1792. Fire-Grates (*G. Brodie*, Birmingham).—Doors are hinged on the side of the jamb, and fold together, so as to entirely or partially cover in the grate. The jambs are hinged at the front of the splay, and serve to hide the doors when the latter are folded back and out of use. The faces of the jamb may be of tile or other desirable material.

2,554. Invalid Beds, Couches, &c. (*W. Dickenson*, Manchester).—A receptacle, with two compartments, is made to slide to and fro on the frame or bed. This motion is given in any suitable way, but preferably by means of a rack fixed to it, and actuated by a quadrant and lever. In one of the compartments is a stuffed pad mounted on a rack with which gears a pinion keyed to a square axle which slides through a bevelled pinion, actuated by another quadrant and lever. In the other compartment is a pan. In the normal position, the pad occupies a hole in the mattress, but by means of the gearing it may be lowered, the receptacles slid along, and the pan brought under the hole so that the invalid may relieve himself.

3,313. Ornamental Cord for Hanging Pictures, &c. (*C. Hodges*, London).—The core is straight, and is made preferably of wire surrounded by hemp, cotton, or other fibrous material. The wire may, however, be dispensed with. Round the core is twisted in a close spiral coil coloured silk or other material, and the strands thus formed can be laid or twisted together in the usual or other convenient manner.

4,577. Portable Gas Lamp (*J. Keirby*, Swinton).—A bracket or brackets are fitted with the usual cocks, burners, and shades, which are attached to a sliding-piece on a vertical rod upon a stand. The sliding-piece is pierced by a curved tube for supplying gas to the brackets, and is fixed to any required height by a thumbscrew. The lamp is connected to an ordinary gas-bracket or chandelier by a flexible tube with a metal coupling. The coupling screws into the place of the burner, or over the screw made for carrying the globe-holder or gallery.

6,652. Carburetting Air (*J. Johnson*, London).—Air is passed through a vessel containing liquid hydrocarbon. Vertical partitions are arranged in a double spiral. The space between these may be filled with porous materials, and the vessel may be heated by the waste heat from a gas-engine.

Wine drinkers may be interested in knowing that shelled almonds are the latest known antidotes for lavish libations, it having been discovered by a professional wine-taster that nothing else so effectually keeps the head clear and palate keen of taste.

Among the most recent applications of the Æolus Waterspray System of Ventilation are those at the new Registry-room, G.P.O.; St. John's Church, Waterloo Bridge-road, S.E.; Mr. Voysey's Church, Swallow-street, Piccadilly; "Greenlands," the seat of Right Hon. W. H. Smith, M.P., Henley-on-Thames; St. John's Church, Gainsborough; Buckfastleigh Abbey, Devonshire; St. Mary's College, Woolhampton; Hospital, Singapore; New Daily Press Offices, Bristol; Dr. Sharp's, Curzon-street, Mayfair, W.; Highfield Chapel, Earlsheaton; New Butchers' Hall, Bartholomew-close; Christ Church (Congregational), Rhyl; Portland Prison; Parkhurst Prison; Hindlip Church, Worcester; West Ham Police-court; Chapel of St. Bartholomew; Convalescent Home, Swanley; and Oldham-street Shops, Manchester (third order).

Our Letter: Box

"Conference [maketh] a ready man."—*Bacon.*

NOTICES TO CORRESPONDENTS.

All Communications for the Editorial Department (including specimens of Sanitary Appliances, &c.), to be addressed to "THE EDITOR OF HEALTH," 74-76, *Great Queen-street, London, W.C. Those intended for the Publishing Office to be sent to* "THE PUBLISHER," *at the same address.*

Contributors are requested to send stamps for the return of the MSS. *in event of non-acceptance. Every care will be taken to ensure the safety of* MSS., *but the* EDITOR *and* PUBLISHERS *cannot hold themselves responsible for accidental loss.*

Correspondents are requested to write on one side of the paper only. The EDITOR *disclaims responsibility for the opinions expressed by Correspondents.*

QUERIES AND ANSWERS.

[Queries sent on post-cards are not attended to.]

[We find it necessary to repeat the statement, frequently made in these pages, that, under no circumstances, can a reply be given in these columns in the same week as that in which a query is received. All despatch is used in replying to our correspondents, but our publishing arrangements do not admit of answers being given earlier than the succeeding week. The Editor cannot undertake to reply to correspondents *by letter*, except in special cases, the determination of which is subject to Editorial selection.]

GENERAL.

A. PURDIE.—The article appeared in HEALTH No. 84.

J. A. N.—There is an establishment of the kind named at the address formerly sent you.

TOPPING.—Master's "Botany for Beginners," or Wilson's "Guide to the Study of Flowers" (Chambers) would suit you for beginning botanical study.

ALICE T.—The examinations of the Science and Art Department in Hygiene are held in May of each year. Apply to the local secretary of your town. It is not necessary to attend classes. Many students are examined on the results of private study.

J. LESLIE.—There is no such use for the fluid you name. It is an odd idea, but an erroneous one.

PHILASTER.—1. Dr. Andrew Wilson's "Manual of Health-Science" is in course of publication by Messrs. Longmans. 2. Parke's "Hygiene" is a large and standard work. 3. Galton's "Healthy Dwellings" (Macmillan).

TAGUS.—Yes, in the camel tribe (as the sole exceptions) the red blood discs are elliptical in shape, but there is no nucleus as in the blood discs of birds, &c. The smallest blood corpuscles are those of the musk-deers.

J. ALLAN.—Apply to the publishers.

SOBIESKI.—See HEALTH Nos. 96 and 97.

A. TAYLOR, AXIS, T. T. A., GERALD C., and VIATOR.—Declined with thanks.

TOM-TIT.—Nitrite of amyl, for the relief of heart-spasm (see article on "The Balance of Power" in HEALTH No. 110), is best given in capsules, which may be had of Mr. Martindale, 10, New Cavendish-street, London, W. Nitro-glycerine Tablets are also given for this complaint.

W. BROWN.—Address your inquiry to the Secretary, St. John's Ambulance, St. John's-gate, Clerkenwell, London, E.C. You should join any local classes that have been formed. You will find information on ambulance in Dr. Wilson's "Manual of Health" (Longmans), and in Cantlie's "Accidental Injuries" (Health Exhibition Handbooks—Clowes.)

BALTRODE.—Personally, we do not care for the cycle you name, but it is a high favourite with many riders, who regard speed as an essential. We contend that, even as regards speed, you may get the same results with the machines of other makers. The bicycle you mean is the "Kangaroo."

TASKER.—The sociable tricycle we rode and described is the "Meteor" of Starley and Sutton. A capital machine in every respect, and as good this season as ever, after last year's hard work.

JENNIE LEE.—You will see we have anticipated your wish in our papers on "Ladies' Dress for Bicycling."

L. G.—You mean the Ethmoid bone; but you are in error regarding its situation. It is the *vomer* which is situated in the nose, as you describe it.

B. P. A.—1. Send us particulars, and we will do our best to give you an opinion. 2. No.

TRING.—Not a safe mixture to use. It can only be employed safely by a medical man.

ELLATHORNE.—Bournemouth decidedly is the safest resort in the case you name. Eastbourne is too cold for such a case.

SANITARY.

ARTHUR REED.—1. Have a secure closet fitted. Twyford' "National" is a capital type. 2. About £4.

T. LEADBETTER.—The medical officer of health. Apply to him. The matter is strictly within his province of duty.

G. M.—There is an invention—if not two—of the kind named already in the market. Inquire of any "patent agent."

SILAS MARNER.—Infection in the case of typhoid fever comes from the bowel-discharges, as in cholera. It is a moot point as to whether typhoid fever is "infectious" in the ordinary sense of the term. As a rule, no risk is incurred by nurses in the case of this fever, so long as the discharges are duly disinfected. Typhus, on the other hand, is markedly infectious, from the patient's breath probably.

B. A.—The section is the 129th of the Act, and imposes a penalty not exceeding £20, or imprisonment not exceeding a month (with or without hard labour), on any person who lets for hire, or shows for the purpose of letting, any house or part thereof (and who falsifies the fact on being questioned), in which any person has suffered, within six weeks previously, from any dangerous infectious disorder. Section 127 provides for the disinfection of any public conveyance.

J. D. MACKENZIE.—In such a case apply to the local authority or to their officer, the sanitary inspector for your district. Your friend might fortify himself, also, by an opinion from his medical man, which, under the circumstances you name, could not fail to show that such a state of matters was prejudicial to health. Why not go to the landlord direct? Agents, as a rule, like to keep down expense, and care nothing for the health of tenants; but it is very clear that if illness, traceable to the drainage defects, breaks out in the house, the tenant can recover damages, and no agent can shelter himself or excuse himself under the circumstances. Read Mr. Munday's later articles. The Public Health Act provides for the case you name. Let your friend write to the local authority of the parish, if the landlord is not amenable to reason, but appeal to the landlord in the first instance.

FORTH.—Consult a respectable solicitor. The case is one for legal advice.

B. G. M.—1. See HEALTH, No. 102. 2. Banner's. 3. We have not yet seen the system.

MEDICAL.

H. W. D.—1. Any druggist will supply you with the glycerine of carbolic acid. It is a recognised preparation already made up. 2. Probably a letter sent to the Press Club, Fleet-street, London, E.C., would find the inventor of the "Dial" machine. We have not seen the invention. We use a "Remington" type-writer. 3. No type-writer can act as a cure to dimness of sight. We should say good sight is indispensable for rapid writing.

R. E. P.—First, take twenty drops Cascara Cordial in water twice daily an hour before your meals. This will tone your digestive organs. Avoid tea and coffee and stimulants. Continue cold sponging each morning. Sleep on a hard mattress, avoid fluids (and suppers) late at night, and take plenty of outdoor exercise. Afterwards take a spoonful of Fellowes' Syrup of the Hypophosphites in a wineglass of water, thrice daily, an hour before your meals for a time. What you mention is of no account whatever. You must be unusually skilful in the use of the microscope for a layman to detect what you name. In our opinion, you are mistaken.

OTHELLO.—Apply a very little zinc ointment at night to the lips, and take internally the iron tonic recommended to "Erin" in last number of HEALTH.

W. E. P.—Avoid tea and coffee for a time as an experiment, and try Cadbury's cocoa, or Tulloch's, instead. Give up vegetables also. Try the effect of ten drops Towle's or Collis Browne's Chlorodyne in water once daily when the symptoms supervene. If not cured, write again.

G. C. S.—Give the child internally half a teaspoonful or so of Scott's Emulsion of Cod Oil with Hypophosphites, to which add three drops *Fer Bravais*, after his food, twice daily. There is indication that constitutional treatment is necessary. Outward applications are of no service in such cases. The sea air should be persisted in still.

CORNUBIAN.—1. See advice given to "Isabella" in last number of HEALTH, regarding the treatment of the feet and corns. 2. The belt might certainly be tried as advantageous. 3. Rest after your meals is absolutely necessary, and possibly a little good

claret taken with dinner will relieve you. Morson's Pepsine, taken with food, often gives relief in such cases.

E. R. Roberts.—Wash the head twice weekly with Iodoform Soap and tepid water, and report result to us. Give internally, the Cod-Oil and Iron as recommended to "G. C. S." above. The child is in need of such a tonic.

Stenographer.—1. Probably, the effect, after such an interval, would be found as of old. This is quite usual. 2. What are the exact initials of the gentleman in question? Send this information, and we will reply to you.

C. G. Bailey.—You are only worrying yourself without any cause. You must persevere with the measures recommended to "R. E. P." in the present number of Health. You cannot expect to be better in a week or two. You have no need to be alarmed. Simply follow, perseveringly, the directions noted.

A. M. W.—For the rheumatism, try the effect of applying Tidman's Sea-salt, heated, in a flannel-bag, to the painful parts, and bathe the parts occasionally with hot water in which Tidman's salt has been dissolved. At your age, drugs are not advisable. Food to be light. If not bettered, write again.

Kernaim.—Look to the water you drink. Try the effect of taking potass or soda only for a time, so as to see the effect of giving up the water. Take fifteen drops Collis Browne's or Towle's Chlorodyne when your symptoms are severe; and, if necessary, repeat this dose in six hours. After you have been cured of your symptoms, take, for a time, the tonic recommended to "Bitters," in Health No. 111. Avoid all vegetable foods.

H. G. E.—See and follow advice to "A Sufferer," in Health No. 111. The "worms" in your skin are merely filled-up skin-glands, and are due to defective skin-action.

G. Brown.—We advise you to try the effect of less solid food for a time. Give up tea and coffee, and take Scott's Midlothian Oatmeal for breakfast. Morson's Pepsine, taken with your food, will do you good. Avoid late suppers, and rest after meals. As regards the other matters, use an injection of Quebascho—a teaspoonful of this extract added to a tumbler of warm water, twice or thrice daily. The London agents for Quebascho are Messrs. Brown & Co., 37, Farringdon-road, E.C. This will aid your recovery. For the rest, twenty grains bromide of potash, taken occasionally, may do you good, although we advise you to trust more to open-air exercise—as a sedative. Glad to be of any further service.

Wayward.—You need have no fears or alarms. Read and follow advice given to "R. E. P." in the present number of Health, and you will get quite well. The tonic there named will brace up your system.

Varicose.—Give up all sports and exercise, and rest as completely as possible for a time. Take a lead and opium pill, once daily, for a day or two, if your symptoms return. Avoid vegetables, and let your food be light until you are cured. If not bettered, however, write again. Are you sure you do not suffer from piles?

O. P. O.—The idea you name is not a new one, but we doubt its correctness. We have had no experience of the use of the acid; but it would do no harm, if tried. If you can send us the quotation, we may help you further. The dose of citric acid is from ten to twenty or thirty grains. Citric acid does not reach the tissues, remember, but is decomposed in the blood—unless given in doses too large to be safe.

Brit.—You are only nervous. Take for a time the tonic recommended to "Bitters" in the last number of Health, and inhale at bed-time the steam arising from a pint of hot water, to which a teaspoonful of Friar's Balsam has been added. This will probably cure your cough, and the tonic will brace you up.

W. S.—We should advise you to shave the moustache off completely for some time. Persevere with the Macassar Oil for the hair. The moustache hairs are evidently weak, and shaving is the best remedy under the circumstances. Push back the skin at the root of the nails with the towel each day when you wash your hands. Do not cut or pare the skin at the nails.

Ferro.—1. No external applications are necessary. Look to your diet; eat vegetables and fruits; and avoid constipation. 2. Depends on the exact case for which a tonic is required. There are no such things as "blood purifiers." No drug has the power to purge the blood of so-called "impurities," which are really constitutional conditions. Either tonic will do you good.

A. B.—Try, as a first application, the soda and glycerine lotion recommended to "Dunedin" in Health No. 111, and let us hear how you are after a trial of this advice.

C. E. Pickering.—Mutton is more easily digested than beef, on account of the different character and greater delicacy of its fibres, just as chicken is, in turn, more digestible than mutton. This was proved long ago by the experiments of Dr. Beaumont on Alexis St. Martin. See articles recently published in Health on "The Science of Digestion."

Alex.—We only send names and addresses of physicians and surgeons on receipt of stamped directed envelope. We can recommend you to a high authority in Edinburgh on receipt of such address. Glad to be of service to you.

F. A. B.—Read and follow carefully out advice given to "R. E. P." in the present number of Health. You need be under no apprehension, for, as you are aware, only quacks exaggerate the so-called "effects" of such ailments. All you require, in our opinion, is a course of bracing and tonic treatment. That advised you above will have the effect of probably curing you. You will require, however, to take more open-air exercise. What you name otherwise are simply symptoms of health, not of disease. Regarding the hair, see advice given to "C. S." in No. 111 Health. Let us hear how you are after trial of the advice given.

Nævus.—We should be glad to help you in every way, but we do not see that there is any method of determining what you wish, save by a good opinion. Send us a stamped addressed envelope, and we will see if we can put you in the way of obtaining such an opinion.

Une Femme.—In such a case as yours we would counsel you to obtain the opinion of a competent physician, accustomed to treat such ailments. No other aid can be of the least service to you. We shall be glad to send the address of a high authority in London, on receipt of a stamped addressed envelope.

H. C.—Bathe the parts frequently with tepid water, to which a little of Condy's Fluid has been added, and take internally for a time fifteen drops *Fer Bravais* in water, thrice daily, an hour before your meals.

G. M.—You should not meddle with such a substance, or attempt any amateur experiments in dispensing it. The acid you name should not be used or taken save under medical direction. Any druggist will sell you tar pills.

W. J. N.—You cannot hope to be well with such work in such a place, and with such hours. If you wish to get rid of your troubles you must change your occupation. You require fresh air, exercise, and nourishing food. It is of no use even prescribing a tonic for you so long as you work fourteen hours in an underground kitchen.

J. E. M.—Simply inject twice or thrice daily with tepid water in which a few crystals of permanganate of potash have been dissolved, so as to give the fluid a light claret colour. Gradually reduce the strength of this fluid to a very light pink. Give up all other medicines. All injections and gargles lose their effect when too long persisted in, and you are at present only keeping up the irritation. In addition, take the tonic prescribed to "Bitters" in the last number of Health; you evidently require such medicine. Be careful as to extreme cleanliness.

Jarcon.—Wear a suspensory bandage, and bathe each morning with cold water, to which a little Pond's Extract has been added. Not dangerous; and may disappear by care and attention to above directions.

C. A. B.—You may possibly better yourself very much by sponging with cold water each morning; by taking the tonic recommended to "Bitters" in last week's Health; and by resting from all exercise of the kind for some time.

C. Douglas.—Wash the hair with Iodoform Soap and tepid water twice or thrice weekly for a time, and thereafter rub a little Carbolised Vaseline into and around the bare patches. Afterwards, when this treatment has become unnecessary, use Rowland's Macassar Oil rubbed into the roots daily, and use a soft brush always.

J. C. (Alloa).—If you had perused the "Notes" carefully, you would have seen that it is the "glycerine *of* carbolic acid" which was mentioned. This is a preparation kept ready made up of a definite strength by every druggist.

Cuticle.—There could be no harm in trying the hair preparation you name. We prefer Rowlands' Macassar Oil, well rubbed into the roots each morning, and a soft brush used for the hair always. We are glad to hear your case has decidedly improved under the treatment prescribed. If you could only obtain a lengthened rest, you would get quite well.

Castor.—Try the following:—Thymol, one scruple; rectified spirit, three drachms; light carbonate of magnesia, ten grains; water to make up three ounces. Label: "A teaspoonful to be added to a pint of water (at 150° Fahr.) and the vapour to be inhaled for some minutes, once or twice daily." Take care of chill after such inhalations.

Pancomy.—1. Growth can only be promoted by due exercise, and nourishing foods. There are no specifics for growth other than these measures. 2. A hard mattress, certainly. 3. See advice to "R. E. P." in the present number of Health.

Ouvrir.—We cannot advise you further, under the circumstances. Nothing more can be said or suggested to you. Try the tonic you were ordered. Such symptoms are often ameliorated by measures which brace up the nervous system.

Bathonian.—The symptoms you name are not at all common as

[*Continued on page* 144.

For Bilio[illegible] Headaches. Acts directly on
A Cure for Indi[illegible]ion, Constipation, and all Stomac
"Acts as an Intestinal Tonic, and its habitual u
occasionally will keep the body in perfect health.
Supersedes all others, and is recommended by the le

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…lozenge to
dissolve occasi… in the mo… …escription No. 3
you enclose for, say, a week at a… …intervals of a week
each), so long as the symptoms co…ue. This treatment to be
subsequent to the advice first-named above. You need not be
alarmed, as those slight symptoms (No 2.) are not unusual, and
will disappear as you brace up your system. You were treated in
an excellent manner.

DYSPEPTIC.—If you send us addressed, stamped envelope we will forward you the particulars you desire.

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T. H., HOLBORN.—Give the child Dusart's Lacto-Phosphate of Lime, as directed on the bottle. He must be made to rest as much as possible. Let him roll about on a mattress placed on the floor. Give him new milk as well, and look to his health generally. We do not think from your account there is any cause for alarm.

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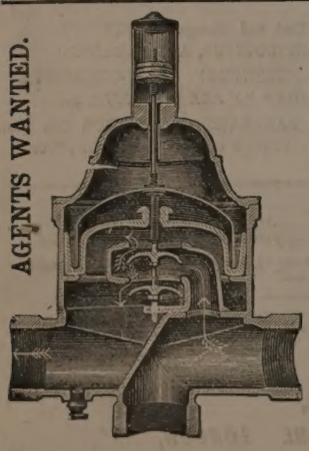

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Without Governor, the Gas consumed from 1st December to 9th February, 1884, was 564,500 feet at 3s. 6d. per Thousand	£98 15 9	Without Governor, the Gas consumed from 1st December to 9th February, 1884, was 479,800 feet, at 3s. 6d. per Thousand	£87 19 4
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Leaving a Balance over the cost of £12 13 7 in Ten Weeks.

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has been known for more than 80 years to be the best and safest preserver and beautifier of the hair; it contains no lead, mineral, or poisonous ingredients, and can now also be had in a golden colour, for fair and golden-haired children and persons. Sizes 3s. 6d., 7s., 10s. 6d., & 21s. Sent by Post for 3d. above these prices. Ask for ROWLANDS' MACASSAR OIL, of 20, Hatton-garden, London. Sold everywhere.

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INVALUABLE IN ALL CASES OF WEAKNESS.

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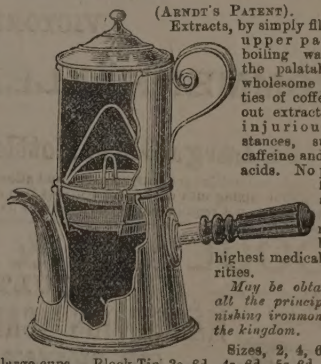

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For Internal Inflammation and Ulceration.—Commence with an injection of one tablespoonful to one quart of warm water, twice or three times a day. After one week the strength of the injection may be increased to two tablespoonfuls to one quart of water. Care should be taken to use such a Syringe as will expand the folds of the Mucous Membrane, so that every portion will come in contact with the remedy.

For Piles.—Use as an injection one teaspoonful of the Extract in a tumbler of warm water, twice or three times a day. If the piles protrude, spread a soft cloth with the clear Extract and apply to the parts and fixed with a bandage, or mixed with equal parts of Vaseline.

For a Gargle in Sore Throat.—Use one or two tablespoonfuls in a pint of water.

For Catarrh, or Cold in the Head, &c.—Use a douche of one tablespoonful to one quart of warm water; use also with Nasal Syringe.

For Diarrhœa and Dysentery.—Use dose from half a teaspoonful to a teaspoonful internally, as occasion may require.

For Burns and Scalds.—Spread a soft cloth with the clear Extract; apply to the part affected.

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Use with care, so as not to allow the Extract to come in contact with linen, and should it become stained, wash at once with cold water, without soap, so as to avoid a stain.

These directions are only a basis from which Physicians can form an opinion as to the best modes of application.

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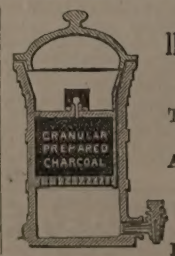

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